Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for adjusting a speed of a central processing unit (CPU), comprising:

measuring a usage of the CPU;

comparing the measured CPU usage with a predetermined reference CPU usage range; and

adjusting the speed of the CPU responsive to the comparison when the measured CPU usage is outside the predetermined reference CPU usage range, wherein if the measured CPU usage is more than a maximum reference CPU usage of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by initializing the CPU speed for recovering a high performance state.

2. (Original) The method according to claim 1, wherein the predetermined reference CPU usage range can be set either with or without a user's input.

3. (Previously Presented) The method according to claim 1, wherein if the measured CPU usage is less than a minimum reference CPU usage of the predetermined reference CPU usage range, then the adjustment of the CPU speed comprises reducing the CPU speed in a stepwise fashion.

4. (Previously Presented) The method according to claim 3, wherein the reduction of the CPU speed comprises adjusting the speed to a next lower speed.

5. (Previously Presented) The method according to claim 1, wherein if the measured CPU usage is between minimum and maximum reference CPU usages of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by maintaining current CPU speed.

6. (Currently Amended) The method according to claim 1, wherein if the measured CPU usage is more than ~~a~~ the maximum reference CPU usage of the predetermined reference CPU usage range, then the ~~adjustment~~ initializing of the CPU speed is carried out by recovering the CPU speed, wherein the recovered CPU speed is a maximum CPU speed.

7. (Original) The method according to claim 1, wherein the CPU usage is measured by detecting registry information of a computer system.

8. (Original) The method according to claim 1, wherein the CPU usage is measured by calculating an idle thread value of the CPU for a predetermined period of time.

9. (Original) The method according to claim 1, wherein the measuring, comparing and adjusting steps are repeated in order at predetermined intervals of time.

10. (Currently Amended) The method according to claim 1, wherein the predetermined reference CPU usage range is set by an individual user of the CPU or the predetermined reference CPU usage range is preset.

11. (Currently Amended) The method according to claim 1, wherein the ~~predetermined reference CPU usage range is preset~~initialized CPU speed is obtained by initializing a throttle rate for the CPU speed to zero.

12. (Currently Amended) A computer, comprising:

user interface means for enabling speed adjustment based on CPU usage;

power management means for controlling a CPU's speed; and

device driver means for reading CPU usage and controlling said power management means, wherein the device driver means comprises:

a first circuit that measures a usage of the CPU,

a second circuit that compares the measured CPU usage with a predetermined CPU usage range, and

a third circuit that adjusts the speed of the CPU responsive to the comparison, wherein ~~no adjustment is made~~ the speed of the CPU is directly set to a current operating maximum when the measured CPU usage is ~~within~~ greater than the predetermined reference CPU usage range.

13. (Previously Presented) The computer according to claim 12, wherein the power management means automatically controls a register in a CPU to adjust the speed of the CPU.

14. (Original) The computer according to claim 12, wherein the device driver means comprises a ring-3 layer, a ring-0 layer and a hardware layer.

15. (Currently Amended) A stored program for machine implemented adjustment of a speed of a central processing unit (CPU), comprising:

a first routine that measures a usage of the CPU;

a second routine for comparing the measured CPU usage with a predetermined CPU usage range; and

a third routine for adjusting the speed of the CPU, wherein the third routine comprises:

a first subroutine for reducing the speed if the measured CPU usage is less than a minimum reference CPU usage of the predetermined CPU range,

a second subroutine for maintaining the speed if the measured CPU usage is within the predetermined CPU usage range, and

a third subroutine for recovering the speed if the measured CPU usage is more than a maximum reference CPU usage of the predetermined reference CPU usage range, wherein said third subroutine recovers said speed by setting the speed of the CPU to a maximum speed of the CPU.

16. Canceled

17. (Previously Presented) The stored program according to claim 15, further comprising a fourth routine to repeat the first to third routines at predetermined intervals of time, wherein said maintaining the speed is performed by adjusting when the measured CPU usage is outside the predetermined CPU usage range.

18. (Original) The stored program according to claim 15, wherein the first routine comprises detecting registry information of a computer system or calculating an idle thread value of the CPU for a predetermined period of time.

19. (Currently Amended) The stored program according to claim 15, wherein the third subroutine initializes clock speed by setting a throttle rate to zero.

20. (Previously Presented) The stored program according to claim 15, wherein the predetermined reference CPU usage range is set by an individual user of the CPU.

21. (Previously Presented) The computer according to claim 12, wherein the third circuit comprises:

a first unit that reduces the speed if the measured CPU usage is less than a minimum reference CPU usage of the predetermined CPU range;

a second unit that maintains the speed if the measured CPU usage is within the predetermined CPU usage range; and

a third unit that recovers the speed if the measured CPU usage is more than a maximum reference CPU usage of the predetermined reference CPU usage range.

22. (Previously Presented) The method of claim 1, wherein if the measured CPU usage is less than a minimum reference CPU usage of the predetermined reference CPU usage range, then the adjustment of the CPU speed comprises reducing the CPU speed in a stepwise fashion, wherein the reduction of the CPU speed comprises adjusting the speed to a next lower speed, and wherein if the measured CPU usage is between minimum and maximum reference CPU usages of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by maintaining current CPU speed by performing no adjustment.

23. Canceled

24. (Currently Amended) A method for adjusting a speed of a central processing unit (CPU), comprising:

measuring a usage of the CPU;

comparing the measured CPU usage with a predetermined reference CPU usage ~~range~~; and

adjusting the speed of the CPU in accordance with the comparing, wherein if the measured CPU usage is ~~between lower and upper reference CPU usages of~~ greater than the predetermined reference CPU usage ~~range~~, then the adjustment of the CPU speed is carried out by ~~maintaining~~ maximizing current CPU speed.

25. (Currently Amended) A method for controlling a performance state of a central processing unit (CPU), comprising:

measuring a usage of the CPU;

comparing the measured CPU usage with a predetermined reference CPU usage range; and

determining the performance state of the CPU responsive to the comparison, wherein if the measured CPU usage is ~~less than a minimum reference CPU usage of~~ outside the predetermined reference CPU usage range~~,~~, then the determination of the CPU performance state includes changing the CPU performance state, wherein the ~~determination of the CPU performance state comprises changing the performance state to a next lower performance state in a stepwise fashion~~ CPU usage is measured by calculating an idle thread value of the CPU for a predetermined period of time.

26. (Previously Presented) The method according to claim 25, wherein the predetermined reference CPU usage range can be set either with or without a user's input.

27. Canceled

28. (Previously Presented) The method according to claim 25, wherein if the measured CPU usage is between minimum and maximum reference CPU usages of the predetermined reference CPU usage range, then the determination of the CPU performance state is carried out by maintaining the CPU performance.

29. (Previously Presented) The method according to claim 25, wherein if the measured CPU usage is more than a maximum reference CPU usage of the predetermined reference CPU usage range, then the determination of the CPU performance state is carried out by initializing the CPU performance state for recovering high performance state.

30. (Previously Presented) The method according to claim 25, wherein the CPU usage is measured by detecting registry information of a computer system.

31. Canceled

32. (Currently Amended) The method according to claim ~~25~~ 29, wherein the measuring, comparing and determining steps are repeated in order at predetermined intervals of time, wherein the high performance state is obtained by maximizing a current CPU speed.

33. (Currently Amended) The method according to claim ~~25~~ 32, wherein the ~~predetermined reference CPU usage range is set by an individual user of the CPU~~current CPU speed is maximized by initializing a clock throttle rate to zero.

34. (Currently Amended) The method according to claim 25, wherein the predetermined reference CPU usage range is set by an individual user of the CPU or preset.

35. (New) The method of claim 25, wherein if the measured CPU usage is less than a minimum reference CPU usage of the predetermined reference CPU usage range, then the adjustment of the CPU speed comprises reducing the CPU speed in a stepwise fashion, wherein the reduction of the CPU speed comprises adjusting the speed to a next lower speed, and wherein if the measured CPU usage is between minimum and maximum reference CPU usages of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by maintaining current CPU speed by performing no adjustment, and wherein if the measured CPU usage is more than a maximum reference CPU usage of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by recovering high performance operating CPU speed.

36. (New) The method according to claim 24, wherein said maximizing is performed by initializing a clock throttle rate to zero.

37. (New) The method according to claim 24, wherein said measuring comprises detecting registry information of a computer system or calculating an idle thread value of the CPU for a predetermined period of time.

38. (New) A method for controlling a performance state of a central processing unit (CPU), comprising:

measuring a usage of the CPU;

comparing the measured CPU usage with a predetermined reference CPU usage range; and

adjusting the speed of the CPU responsive to the comparison when the measured CPU usage is outside the predetermined reference CPU usage range, wherein the CPU usage is measured by detecting registry information of a computer system.

39. (New) The method of claim 38, wherein if the measured CPU usage is less than a minimum reference CPU usage of the predetermined reference CPU usage range, then the adjustment of the CPU speed comprises reducing the CPU speed in a stepwise fashion, wherein the reduction of the CPU speed comprises adjusting the speed to a next lower speed, and wherein if the measured CPU usage is between minimum and maximum reference CPU usages of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by maintaining current CPU speed by performing no adjustment, and wherein if the measured CPU usage is more than a maximum reference CPU usage of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by maximizing current CPU speed.

40. (New) A method for adjusting a speed of a central processing unit (CPU), comprising:

measuring a usage of the CPU;

comparing the measured CPU usage with a predetermined reference CPU usage range; and

adjusting the speed of the CPU responsive to the comparison when the measured CPU usage is outside the predetermined reference CPU usage range, wherein said measuring comprises calculating an idle thread value of the CPU for a predetermined period of time.

41. (New) The computer according to claim 12, wherein the first circuit is configured to detect registry information of a computer system or calculate an idle thread value of the CPU for a predetermined period of time.